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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/670,113	09/26/2000	William Y. Conwell	60299	4862

23735 7590 11/15/2005

DIGIMARC CORPORATION  
9405 SW GEMINI DRIVE  
BEAVERTON, OR 97008

EXAMINER
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PATEL, SHEFALI D

ART UNIT	PAPER NUMBER
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2621

DATE MAILED: 11/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/670,113

Applicant(s)

CONWELL, WILLIAM Y.

Examiner

Shefali D. Patel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 3,5 and 8-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 3,5 and 8-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                         |                                                                             |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                                |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____                                                             | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Response to Amendment***

1. The amendment was filed on September 9, 2005.
2. Claims 3, 5 and 8-25 are pending in this application with claim 25 being newly added.
3. Objections made to claims 17-18 and 22 have overcome and have been withdrawn.

### ***Response to Arguments***

4. Applicant's arguments filed on September 9, 2005 (Remarks pages 5-7) have been fully considered but they are not persuasive.

Applicant argues stating that the bar code in Li et al. is not a watermark and further on page 6 applicant argues stating:

“In the present case, an artisan would understand from the specification that a watermark is essentially imperceptible. The bar code taught by Li would not be understood by an artisan as a watermark.”

The examiner agrees that the element 45 in Li's Figure 3 is perceptible. However, according to prior art, the watermark, (i.e., coded symbol, a signal, etc.) can be in the form of perceptible (visible) and imperceptible (invisible). Applicant's arguments are not persuasive because at least the independent claims do not recite whether the watermark serving to associated the image is imperceptible or not. The examiner interprets the claim language as broad as possible. Therefore, Li currently meets all of the limitations of claims 3, 5 and 8-24 as in the previous office action.

The newly added claim 25 is rejected in view of Conover et al. (US 6,373,960).

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 3, 5, 16, 18-20, and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Li et al. (hereinafter, "Li") (US 5,506,697).

With regard to **claim 3** Li discloses a method (using a system of Figure 3, col. 7 lines 46 to col. 8 lines 1-3) comprising: receiving data corresponding to an image, the image including a depiction text (Fig. 3 element 40); recognizing at least some of said depicted text (Fig. 3 element 47, col. 7 line 50); and encoding a watermark in said image (Fig. 3 element 45), said watermark serving to associate said image with said recognized text (col. 7 line 59, col. 8 lines 1-3).

With regard to **claim 5** Li discloses the method of claim 3 in which said recognizing includes recognizing by an automated OCR process (converts alphanumeric text into a highly compressed coded symbol at col. 7 line 50).

With regard to **claim 16** Li discloses an apparatus (figure 3) comprising: a scanner for producing scan data corresponding to an original document (elements 40 and 42, Figure 3); an OCR engine for recognizing text from said scan data (converts alphanumeric text into a highly compressed coded symbol at col. 7 line 50); and a watermaker that alters an output from said apparatus to encode a watermark therein, the watermark serving to associate said output with said stored text (application data source 64, col. 9 lines 18-34).

With regard to **claim 18** Li discloses output comprising a hardcopy page (element 46 and 66, Figure 3), and watermark serves to directly encode at least a portion of said recognized text in the output (element 45/56b figure 3).

With regard to **claim 19** Li discloses a storing device for data repository at col. 9 lines 3-16.

With regard to **claim 20** Li discloses encoding at 47 in Figure 3.

With regard to **claim 23** Li discloses encoding follows recognizing as seen in Figure 3, first scanning and recognizing at element 42 and then encoding at element 47.

*Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 8-9, 22 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alves (US 6,747,687) in view of Li et al. (hereinafter, "Li") (US 5,506,697).

With regard to **claim 8** Alves discloses a method of augmenting image data collected by a security camera (Figure 1, col. 5 lines 57 to col. 6 lines 1-2), comprising: analyzing a frame of image data from said security monitoring camera for text information depicted therein (analyzing images of entering/exiting vehicle by a video camera 104/116, respectively at col. 2 lines 56 to col. 3 lines 1-12 with text information about the license plate number, color, trim, style, etc. of the vehicle). Alves does not expressly disclose digitally watermarking image data wherein said watermark associates the image data with the text information. Li discloses this at Figure 3 element 45 and col. 7 lines 59 to col. 8 lines 1-3. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teaching of Alves with Li. The motivation for doing so is to authenticate the document by encoding and digitally embedding element 45 into document 50 as seen in Figure 3 and suggested throughout the invention of Li. Therefore, it would have been obvious to combine Li with Alves to obtain the invention as specified in claim 8.

With regard to **claim 9** Alves discloses having the frame of image data including a depiction of a vehicle license plate and said text information comprises text on said license plate (col. 3 lines 4-12).

With regard to **claim 22** Li discloses a storing device for data repository at col. 9 lines 3-16.

With regard to **claim 24** Li discloses analyzing comprising performing an OCR process on said depicted text information (converts alphanumeric text into a highly compressed coded symbol at col. 7 line 50).

5. Claims 10-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sites (US 6,799,302) in view of Li et al. (hereinafter, "Li") (US 5,506,697).

With regard to **claim 10** Sites discloses a method comprising receiving an electronic document, the document comprising a graphical representation of text, but not including ASCII data corresponding thereto (Figure 1 element 102, col. 2 lines 31-36 where the document is disclosed as a PDF file); analyzing said document for text information using an OCR process (user prints the document after receiving at col. 3 lines 19-36). Sites discloses having the PDF/PDL file include watermark information at col. 2 lines 41-45. However, Sites does not disclose digitally watermarking electronic document wherein the digital watermark associates the electronic document with the text information. Li discloses this at Figure 3 element 45 and col. 7 lines 59 to col. 8 lines 1-3; col. 10 lines 43-49. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teaching of Sites with Li. The motivation for doing so is to authenticate the electronic document by encoding and digitally embedding element 45 into document 50 as seen in Figure 3 and suggested throughout the invention of Li. Therefore, it would have been obvious to combine Li with Sites to obtain the invention as specified in claim 10.

With regard to **claim 11** Li discloses document comprising FAX data at 52, 54, and 69 in Figure 3. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teaching of Sites with Li. The motivation for doing so is to have FAX data instead of PDF to transmit the data via FAX to a different party rather than printing the document. Therefore, it would have been obvious to combine Li with Sites to obtain the invention as specified in claim 11.

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With regard to **claim 12** Sites discloses PDF document at col. 2 lines 34-35.

With regard to **claim 13** Li discloses scanning a paper document on a platen, and producing graphical data corresponding thereto at 40 and 42 in Figure 3.

With regard to **claim 14** Li discloses directly encoding the electronic document with at least some of said text information at col. 8 lines 10-15.

With regard to **claim 15** Li discloses storing the text information in a data repository and wherein the digital watermark associates the electronic document with said information in the data repository at col. 9 lines 7-16.

6. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Li in view of Venkatesan et al. (hereinafter, "Venkatesan") (US 6,801,999).

With regard to **claim 17** Li discloses the output comprising a hardcopy page as disclosed above in claims 16 and 18 and the arguments are not repeated herein, but are incorporated by reference. Li does not expressly disclose having a watermark that serves as a pointer to a memory location in which said recognized text is stored. Venkatesan discloses this at col. 13 lines 30-36. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teaching of Venkatesan with Li. The motivation for doing so is to define a plurality of specific locations as suggested by Venkatesan at col. 13 lines 44-48. Therefore, it would have been obvious to combine Venkatesan with Li to obtain the invention as specified in claim 17.

7. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Alves (US 6,747,687) in view of Li et al. (hereinafter, "Li") (US 5,506,697) as applied to claims 8-9, 22 and 24 above, and further in view of Conover et al. (US 6,373,960) (hereinafter, "Conover").

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With regard to **claim 25** Alves (modified by Li) discloses a method of augmenting image data collected by a security camera (Figure 1, col. 5 lines 57 to col. 6 lines 1-2) and the arguments are not repeated herein, but are incorporated by reference. Neither Alves nor Li expressly disclose digital watermark being essentially imperceptible to human viewers of image data. Conover discloses inserting to the compressed data a digital watermark that is imperceptible at col. 5 lines 30-32 and its respective portions in the specification. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teaching of Conover with Alves and Li. The motivation for doing so is that the watermark will be invisible to the human eye unless the compressed portion (or an image) is decompressed as suggested by Conover. Especially, the compressed coded symbol 45 of Li (at col. 7 lines 48-51) can be imperceptible when the image is being printed to protected from a unauthorized person. Therefore, it would have been obvious to combine Conover with Alves and Li to obtain the invention as specified in claim 25.

### *Conclusion*

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.



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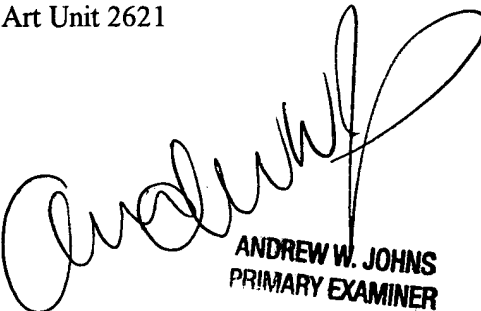
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shefali D. Patel whose telephone number is 571-272-7396. The examiner can normally be reached on M-F 8:00am - 5:00pm (First Friday Off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Mancuso can be reached on (571) 272-7695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Shefali D Patel  
Examiner  
Art Unit 2621

November 4, 2005



**ANDREW W. JOHNS**  
**PRIMARY EXAMINER**